Before the Federal Communications Commission Washington, DC 20554

| In the Matter of |) | |
|----------------------|-----|---------------------|
| IP –Enabled Services |)) | WC Docket No. 04-36 |

COMMENTS OF ALCATEL NORTH AMERICA

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Summary of Comments of Alcatel North America

Alcatel submits these comments to the Federal Communications Commission ("Commission") to advocate the Congressional and Commission policies of nonregulation of Internet services and exclusive Commission jurisdiction of these services. Alcatel recognizes that the development of IP-enabled services, particularly those that can deliver real-time voice services, are challenging the legacy regulatory structure in which services were horizontally-integrated with their platforms. The technological developments of IP have enabled both legacy service providers and new entrants to offer converged services.

Alcatel urges the Commission to maintain exclusive jurisdiction over IP-enabled services that originate and/or terminate on IP. Congressional directives concerning Internet and broadband deployment along with the Commission's long standing policy of exclusive jurisdiction over enhanced services and information services justify this approach. Alternatively, a telecommunications services designation on these services would still maintain exclusive Commission jurisdiction since they would satisfy the end-to-end and "mixed use" tests commonly employed to determine jurisdiction.

The Commission should also designate IP-enabled services that do not originate and terminate on the PSTN as "information services." This too is consistent with Congressional mandates and long-standing Commission policy. Alternatively, if the Commission designates these services as "telecommunications services" it should employ its Section 10 forebearance authority liberally in order to maintain a competitive market.

Alcatel also urges the Commission to recognize that the advances in technology that have led to the IP-enabled services being discussed in this proceeding, may also be

used to enhance, rather than avoid, important social obligations such as emergency services and disabled access. The Commission should use this proceeding to examine IP-enabled video services, designating them as Title One, Information Services, in part to create a competitive market place for wireline provided video services. Finally, Alcatel suggests the Commission reexamine its dominant carrier rules to ensure they are not prematurely removed nor unjustly maintained on market participants that no longer possess effective market power or control bottleneck facilities.

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COMMENTS OF ALCATEL NORTH AMERICA

I. Alcatel North America

Alcatel provides communications equipment that enables service providers and enterprises to deliver a wide variety of services over fixed networks, mobile networks, satellite, submarine cable, and/or private enterprise facilities. In the United States, Alcatel leads the broadband access market with a portfolio of products that includes its Digital Subscriber Line Access Multiplexer, Remote Terminal, digital loop carrier, and Fiber to the User products. In addition to the broadband access portfolio, Alcatel's products include mobile technology, softswitches, SIP phones, as well as edge and core network routers.

Globally, Alcatel operates in over 130 countries, ¹ providing a unique perspective to the Commission's examination of services and applications over IP. Service providers throughout the world are looking to Alcatel to deliver IP-enabled services that provide voice, video, and data to their customers in a converged offering that enhances the customer experience while providing operational efficiencies to the provider.²

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¹ Alcatel, Annual Report 2003.

² Alcatel Turns a Corner, Lightreading.com, April 30, 2004. http://www.lightreading.com/document.asp?doc_id=52002&print=true

II. Introduction

Alcatel welcomes the Commission's examination and NPRM focused on issues relating to services and applications making use of Internet Protocol (IP), including but not limited to Voice over IP ("VoIP").³ From a marketing perspective, Alcatel views IP-enabled services as "multimedia over IP," in which a set of voice, video, and data services will be offered to consumers in a converged setting. IP enables converged services to be delivered in a "platform-agnostic" manner where any one particular service is no longer horizontally integrated with its legacy platform (i.e. voice over cable television infrastructure, video over telecommunications facilities, voice over Wi-Fi with a Wi-Fi/mobile handset).

Due to this convergence of services and the migration beyond platform exclusive technologies, the regulatory landscape impacting IP-enabled services needs to be clarified by the Commission. IP-enabled services are being created by technology companies, offered by service providers, and used by consumers as Congress, the Commission, and state regulatory authorities examine how these services will impact existing rules. This debate is primarily due to the rapid growth of IP-enabled voice services in the U.S.⁴ and the fact that many of these services may serve as a replacement for traditional POTS. While the Commission has not yet determined how many of these services will be defined, they are potentially subject to the most extensive set of regulatory requirements

³ *IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, FCC 04-28 (Mar. 10, 2004) ("IP-Enabled Services NPRM").

As of November 2003, there were an estimated 100,000 VoIP customers in the U.S. This number is forecast to grow to more than five million by 2007. All the regional Bell Operating Companies, AT&T, MCI, and multiple independent telcos or other service providers have either initiated a VoIP service or annouced a product offering in the near future. Organization for Economic Cooperation and Development, *VoIP: Developments in the Market*, May 10, 2004, at 30-31. ("OECD Report"). New Paradigm Resources

under Title II of the Communications Act and state laws and regulations. In addition to traffic growth, this need for regulatory clarification is most evident by the number of petitions filed with the Commission,⁵ the actions taken by state regulatory authorities,⁶ and the consideration of legislation in Congress.⁷ Alcatel welcomes the Commission's examination of IP-enabled services, particularly voice services, but it also urges the Commission to continue its efforts to create regulatory parity for the delivery of IP-enabled Internet Access services by concluding the Wireline Broadband proceeding and

predicts VoIP access lines could reach 2.3 million in 2005 and 4.2 million in 2006. Communications Daily, May 18, 2004, at 7.

See, Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service, WC Docket No. 03-45, Memorandum Opinion and Order, FCC 04-27 (rel. Feb. 19, 2004) ("Pulver Declaratory Order"); Level 3 Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1), and Rule 69.5(b) (filed Feb. 4, 2004) ("Level 3 Petition"); Pleading Cycle Established for Comments on Petition of SBC Communications Inc. for Forbearance Under Section 10 of the Communications Act from Application of Title II Common Carrier Regulation to "IP Platform Services," WC Docket No. 04-29, Public Notice, DA 04-360 (rel. Feb 12, 2004) ("SBC IP Platform Petition"); Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges, WC Docket No. 02-361, Order, FCC 04-97 (rel. Apr. 21, 2004)("AT&T Order"). VoIP has also become a critical issue for the FCC's Technological Advisory Council. FCC's TAC Calls Network Vulnerability a Major Issue in VoIP Growth, Communications Daily, Oct. 21, 2003, at 2.

⁶ The Commission has requested comments in a petition filed by Vonage Holding Corporation (Vonage) that requests the Commission preempt an order of the Minnesota Public Utilities Commission (MPUC) requiring Vonage to comply with state laws governing providers of telephone service, even though Vonage avers that it is a provider of information services (and not telecommunications carrier or common carrier subject to title II of the Communications Act of 1934). Pleading Cycle Established for Comments on Vonage Petition for Declaratory Ruling, DC 03-2952 (Sept. 26, 2003). Alcatel filed in this proceeding, through the High Tech Broadband Coalition, arguing that Vonage does not offer telecommunications services subject to state common carrier regulation and Vonage offers and interstate services not subject to state jurisdiction. See, Comments of the High Tech Broadband Coalition, WC 03-211, filed Oct. 27, 2003. On Oct. 16, 2003, the U.S. District Court for Minnesota enjoined the MPUC from enforcing its order. Vonage Holdings Corp. v. Minnesota Pub. Utils. Comm'n, 290 F.Supp 2d 993 (D. Minn. 2003). The NY PSC recently made a decision to regulate Vonage as a telephone corporation. See, PSC: Vonage is a Telephone Corporation as Defined by NYS Law - Commission Seeks to Maximize Benefits of New Technology, Protect Core Public Interests, State of New York Public Service Commission, rel. May 19, 2004. Alcatel, through the Telecommunications Industry Association, has also participated in a proceeding before the California Public Utility Commission arguing that the State lacks authority to regulate VoIP applications due to the inherent interstate nature of such communications. See, Order Instituting Investigation on the Commission's Own Motion to Determine the Extent to Which the Public Utility Telephone Service Known as Voice over Internet Protocol Should be Exempted from Regulatory Requirements, I. 04-02-007, Order Instituting Investigation (filed Feb. 11, 2004). Additionally, the state regulatory agencies in the following jurisdictions have initiated VoIP proceedings: Alabama, Colorado, Florida, Missouri, North Carolina, Ohio, Pennsylvania, Texas, and Wisconsin. OECD Report at 42. 7 "VoIP Regulatory Freedom Act, S. 2281, 108th Congress. "VoIP Regulatory Freedom Act," HR 4129, 108th Congress.

ruling that Broadband over telecommunications facilities are properly classified as information services subject to exclusive jurisdiction of the Commission.⁸ Additionally, the Commission should seek regulatory parity for the delivery of IP-enabled video services to create a competitive market among the various platforms.

III. Status of IP-Enabled Services

By segregating the service from the Platform, IP-enabled services empower new and different service providers to enter the marketplace (horizontal expansion) and provide the ability of all service providers to offer a converged set of diverse products (vertical expansion). The horizontal expansion of service providers is best demonstrated by the number of varying platforms that can offer services, including incumbent telcos, competitive telcos, ISPs, cable television, mobile, etc. Vertically, services are being expanded and converged to greatly enhance the benefits to consumers by delivering a wide array of services and options. For example, Alcatel is developing a fixed/mobile converged set of products that will be user centric regardless of the access technology (home access line, mobile phone, or Wi-Fi PDA). Vonage provides another example of how the convergence of broadband and voice services has enabled consumers to not only receive a more competitively priced means to make phone calls but has provided access

⁸ Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations for Broadband Providers, CC Docket Nos. 02-33, 95-20, 98-10, Notice of Proposed Rulemaking, 17 FCC Rcd 3019 (2002) ("Wireline Broadband NPRM").

⁹ BT, in partnership with Vodafone, announced it would be deploying Project Bluephone, provided by a consortium of vendors that includes Alcatel. This will create one of the world's first fully converged fixed-mobile communications services. The customer will own a single device that will switch seamlessly between fixed and mobile networks.

http://www.btplc.com/News/Pressreleasesandarticles/Corporatenewsreleases/2004/q404release.htm

to a wide range of options to the subscriber, such as "click-to-call," virtual phone numbers, and converged e-mail/voice mail. 10

The increased deployment of broadband internet access networks has made the convergence of services a reality, yet simultaneously has challenged legacy regulatory and commercial rules that relied upon a horizontally converged network in which services were united with distinct platform technologies. Alcatel believes that the advent of IP-enabled services and other applications are directly linked to the deployment of broadband access networks for consumers. Although it has recently accelerated, broadband deployment in the United States has lagged compared to some other major industrial nations. In part, regulatory uncertainty and the regulatory disparity among various platforms has contributed to this delay in broadband deployment. The Commission must act expeditiously or IP-enabled applications and services will be more extensively deployed in other nations with a more investment-friendly environment.

Issues and debates concerning IP-enabled services, particularly real time voice services, are also being considered in other nations. In Japan, there are currently over four million subscribers to Yahoo's VoIP service and an additional 73,000 are added every month;¹⁴ in Korea, the regulator has legalized VoIP services and the market is

http://www.vonage.com/features.php

Alcatel is the leading provider of DSL equipment in the United States and the World (Lightreading article). *Alcatel Turns a Corner*, Lightreading.com, April 30, 2004. http://www.lightreading.com/document.asp?doc_id=52002&print=true

According to the OECD, the United States currently ranks 10th in terms of broadband deployment on a per capita basis.

http://www.oecd.org/document/60/0,2340,en_2649_37409_2496764_119656_1_1_37409,00.html.

¹³ The Commission has pledged to develop an analytical framework that is consistent across multiple platforms...[t]he Commission will avoid simply extending existing rules that were crafted to govern legacy services provided over legacy networks. *Wireline Broadband NPRM*, at 6. Alcatel has argued before the Commission that regulatory disparity among broadband services providers will harm deployment and investment. *Comments of Alcatel USA, Inc.*, CC 02-33 (filed May 3, 2002).

[&]quot;Yahoo! BB Comprehensive Broadband Service Progress Report, May 10, 2004, http://www.softbank.co.jp/English/Index.html (visited May 21, 2004).

growing exponentially;¹⁵ in the European Union, the European Commission recently announced a public inquiry to update Europe's approach to VoIP regulation; and in Canada, the communications regulatory, the CRTC, recently initiated a proceeding to examine the regulatory status of VoIP.

Now that the Commission has initiated this proceeding it should endeavor to complete it as rapidly as possible. Regulatory delay¹⁶ and uncertainty in the U.S. could result in IP-enabled services and applications being deployed more rapidly in other countries. Unlike networks, IP-enabled services serving domestic customers can be moved off shore if the regulatory environment is onerous. The ability for an IP-enabled service provider to operate outside the jurisdiction of the United States or any other nation is clearly demonstrated by Skype, which offers peer-to-peer Voice over IP software from its headquarters in Luxembourg. Skype is not facilities based – it does not provide transmission or access facilities to its customers. Instead, Skype's software enables users to communicate to each other over existing broadband connection and transmission facilities. It is estimated that Skype currently has over 4.5 million users.¹⁷

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OECD Report, at 26.

¹⁶ Examples of unnecessarily long proceedings in which Alcatel has participated include several that are critical to the stability of the broadband market. The Triennial Review NPRM was released in December 2001, order agreed upon in February 2003, written order released in August 2003, and petitions for reconsideration and litigation are ongoing. See, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978 (2003) ("Triennial Review Order"), corrected by Errata, 18 FCC Rcd 19020 (2003), petitions for review pending, United States Telecom Ass'n v. FCC, D.C. Cir. No. 00-1012 (and consolidated cases). The Wireline Broadband Proceeding was released in February 2002 and remains pending, and the NPRM examining the market power and appropriate regulatory status of ILEC provided broadband services was released in December 2001 and remains pending. Review of Regulatory Requirements for Incumbent LEC Broadband Services; SBC Petition for Expedited Ruling That it is Nondominant in its Provision of Advanced Services and for Forebearance From Dominant Carrier Regulation of These Services, CC Docket No. 01-337, Notice of Proposed Rulemaking, FCC 01-360, 16 FCC Rcd 22745 (rel. Dec. 20, 2001). OECD Report, at 27.

IV. <u>Statutory Mandates and Commission Precedent Require the Commission to Exert Exclusive Jurisdiction over Most IP-Enabled Services.</u>

The Commission should preempt state regulation and exert exclusive jurisdiction over all IP-enabled services that originate or terminate, or both, on IP, regardless of whether the service is classified as an "information service," "telecommunications," or a "telecommunications service." The Commission's authority to exert this exclusive jurisdiction is found in several sections of the Communications Act, Commission precedent on information services, Commission precedent on the jurisdictional classification of all communications, and the Commerce Clause of the U.S. Constitution. Preemption of state regulation in this area would not represent a reduction of state regulatory authority, rather an affirmation of Commission action on similar issues.

A. <u>Commission Jurisdiction Over Information Services</u>.

The Commission clearly has exclusive regulatory authority over those IP-enabled services that it classifies as "information services." By employing its end-to-end traffic analysis, its "mixed use" policy, and authority to further certain policy objectives, the Commission has determined many "information services" to be exempt from state regulatory authority.

In general, the Communications Act neatly splits the jurisdictional authority between the Commission and the states. Section 2(a) of the Act provides that the Commission has exclusive jurisdiction over interstate communications, ²¹ and Section

¹⁸ 47 U.S.C. §153(20).

¹⁹ 47 U.S.C. §155(43).

²⁰ 47 U.S.C. §153(46).

²¹ 47 USC 152(a).

2(b) of the Act reserves to the states jurisdiction over intrastate services. While this is the general rule for jurisdiction over communications services, the Act itself provides numerous exceptions in which the Commission may exercise exclusive authority, even over some intrastate traffic. Section 332 of the Act reserves exclusive authority over mobile communications, even that which is purely intrastate; Section 253 provides the Commission with preemption authority in order to promote local competition; and Section 251 of the Act provides the Commission with authority to preempt the network unbundling decisions of a state regulatory authority if the Commission determines the state action is contrary to national policy. These explicit exceptions to the jurisdictional split in Section 2 of the Act illustrate Congress's desire to provide exclusive jurisdiction to the Commission in order to promote a nationwide, uniform policy, including any subset of communications that may be purely intrastate, when justified by an overarching policy objective.

Commission precedent addressing the proper jurisdiction over "information services" also demonstrates a policy of exclusive jurisdiction that has been repeatedly employed and maintained under judicial scrutiny. In February 2004, the Commission ruled that Pulver.com's Free World Dial-up service ("FWD"), which is a peer-to-peer Internet service that does not interact with the PSTN, is an information service subject to exclusive Commission jurisdiction.²⁶ The Commission's jurisdictional analysis in FWD relied upon its long-standing policies of exclusive jurisdiction for "enhanced" and

²² 47 USC 152(b).

²³ 47 USC 332(c)(3)(A).

²⁴ 47 USC 253(d).

²⁵ 47 USC 251(d)(3)

²⁶ Pulver Declaratory Order, at ¶2.

"information services," for traffic in which its end-to-end analysis cannot accurately determine which traffic is intrastate, and its "mixed use" rule, which holds commingled traffic should be the exclusive jurisdiction of the Commission if the interstate portion is more than *de minimis*.

While this decision was narrowly limited to the specific FWD service, the Commission's jurisdictional analysis should control all "information services," even those that include intrastate voice services. First, "enhanced" or "information services" have long been subject to the Commission's exclusive jurisdiction and policy of nonregulation. State regulation, particularly Title II common carrier regulation for those information services that include voice traffic, would run counter to this nationwide policy of nonregulation and should be preempted by the Commission. Second, the Commission's proper use of the end-to-end analysis to determine whether traffic originates and terminates within one state would be impracticable to determine since many IP-enabled services include traffic that is either originated or terminated on the

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²⁷ The 1996 Telecommunications Act employs the term "information services" rather than "enhanced services," which had been used during the Commission's Computer proceedings. The Commission has since determined that "information services" and "enhanced services" should be interpreted to extend to the same functions, although the definition although the definition in the Telecommunications Act is broader. *See, Non-Accounting Safeguards Order*, 11 FCC Rcd 21905, 21955-56 ¶102 (explaining that all enhanced services are information services by not all enhanced services are information services).

²⁸ Pulver Declaratory Order, at ¶ 21.

²⁹ *Id.*, at ¶ 22.

The Commission's policy of nonregulation of Internet services would be disturbed if state jurisdiction over these services was permitted. This policy of nonregulation of the Internet and preclusion of the states was determined in the Computer Inquiry proceedings and codified in §230. *Pulver Declaratory Order*, at ¶15-20.

Title II of the Communications Act imposes certain requirements on common carriers, including requiring carriers to provide services on just, reasonable, and nondiscriminatory rates and terms; to comply with interconnection obligations; to contribute to the universal service fund; to provide access to law enforcement for authorized wiretapping pursuant to CALEA; to comply with disability accessibility requirements; and to comply with privacy requirements. 47 U.S.C. §§ 201-276. *See, AT&T Order*, at ftnt. 16.

Internet.³² The Commission has found there is no automatic method to determine where communications terminate on the Internet or, similarly, where traffic originates on the Internet.³³ Third, the Commission's "mixed use" rule, which provides exclusive jurisdiction for commingled communications traffic in which interstate traffic is more than a de minimis amount, would justify exclusive jurisdiction in the case of IP-enabled services that are originated or terminated, or both, on IP.³⁴

IP-enabled services that originate or terminate on IP, or both, should be subject to exclusive jurisdiction by the Commission. These services all share a similar characteristic as FWD – the interaction of the traffic with the Internet makes determining the geographic location insufficient for accurately determining state jurisdiction without interfering with the Commission's authority over interstate services. Moreover, mobility is an inherent characteristic with many IP-enabled services, which allows the user to send or receive communications via a broadband connection. The Commission's end-to-end and mixed use analyses of these services, given these characteristics, would conclude exclusive Commission jurisdiction is warranted.

B. <u>Commission Jurisdiction Over Telecommunications or</u> Telecommunications Services.

Most of the analysis used by the Commission to determine that FWD is subject to exclusive jurisdiction as an "information service" would be applicable to IP-enabled services that are categorized as "telecommunications" or a "telecommunications service."

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³² See, GTE Telephone Operating Cos., GTE Tariff No. 1, GTOC Transmittal No. 1148, CC Docket No. 98-79, Memorandum Opinion and Order, 13 FCC Rcd 22466 (1998)("GTE DSL Order")..

³³ Id., at ftnt. 78. Discussing the difficulty of determining where the call terminates when it enters the Internet, and the difficulty of where it originates in an IP relay call.

The Commission has used both the end-to-end and mixed use analyses on several occasions to determine that certain telecommunications services and traffic are subject to the exclusive jurisdiction of the Commission. If an end-to-end analysis cannot sufficiently determine the origination or termination point of the traffic, then the Commission should exercise exclusive jurisdiction. Similarly, if the Commission has determined that commingled traffic includes more than a *de minimis* amount of interstate traffic and it is impracticable to segregate the intrastate traffic, then it should exert exclusive jurisdiction. Provided that the origination or termination of the traffic is indeterminable or commingled with more than 10% interstate traffic, then regardless of classification as an "information service" or a "telecommunications service," traffic that originates and/or terminates on IP would satisfy either test and be subject to exclusive Commission jurisdiction.

V. Classification of IP-Enabled Services

The Commission's classification of IP-enabled services must comply with the repeated mandates of Congress to "...preserve the vibrant and competitive free market that presently exists for the Internet...unfettered by Federal or State regulation..." and encourage the deployment of advanced telecommunications capability to all Americans and preserve the free market for Internet services. These Congressional policies underlying the Telecommunications Act of 1996 serve as the basis for the Commission's

³⁴ MTS and WATS Market Structure, Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board, 4 FCC Rcd 5660 (1989).

³⁵ 47 U.S.C. §230(b)(2)

³⁶ §706 of the Telecommunications Act of 1996, codified at 47 U.S.C. §157nt.

Internet policy.³⁷ The Commission should analyze each of the three scenarios for IP-enabled voice services: (1) services that originate and terminate on IP and never interact with the PSTN, (2) services that originate and terminate on the PSTN but are converted to IP for part of the transmission, and (3) services that originate or terminate (but not both) on the PSTN. In scenarios one and three, the Commission should classify these as Title One, Information Services due to the interaction these voice services have with IP, either entirely or at the origination or termination of the call. Scenario two is more closely aligned with the use of digitizing voice in long haul transport and the current classification as a telecommunications service should remain undisturbed.

A. <u>IP-enabled Voice Services that Originate and Terminate on IP and Never Interact with the PSTN.</u>

IP-enabled voice services that are initiated and terminated independent of the PSTN and never interact with the PSTN should be classified as a Title One "Information Service," exempt from most Title II regulations,³⁸ and subject to exclusive jurisdiction from the Commission.³⁹ The Commission's recent decision in Free World Dial (FWD)⁴⁰ is instructive. In FWD, the Commission held that this peer-to-peer Internet service should be classified as an interstate, information service even though it enabled members to exchange real time voice services. This determination was similar to the

Wireline Broadband NPRM, at ¶3 (citing National Cable Telecommunications Ass'n v. Gulf Power Co., 122 S. Ct. 782 (Thomas J. concurring in part, dissenting in part).

Alcatel understands that an information service and telecommunications service are mutually exclusive, but it explains further in this Comment that the Commission should employ its Title One ancillary jurisdiction to impose certain safety and social obligations on IP-enabled voice services that are routed in telecommunications services regulation.

³⁹ By stating independent of the PSTN the service will not use the PSTN for the completion of voice transmission. Some Internet applications that provide real-time voice services that would qualify under this category, also provide PSTN interconnection. Such interconnection alone would not justify removing the transmission from this categorization.

⁴⁰ Pulver Declaratory Order.

Commission's statement in the Stevens Report,⁴¹ which indicated a computer-to-computer voice call would not be classified as a telecommunications service.⁴²

The Commission should expand its decision in FWD and its statement in the Stevens Report to apply to all IP-enable services, including those that provide voice, that do not interact with the PSTN. These services are generally initiated via broadband Internet connection and remain on the Internet for the entire transmission. Imposing a telecommunications or telecommunications service classification on these IP-enabled transmissions would be a departure from Commission precedent by placing Title II obligations on an Internet application. Such a departure simply because the IP transmission includes voice traffic would be unjustified.⁴³

B. <u>IP-Enabled Voice Services that Originate and Terminate on the PSTN but are Converted to IP for Part of the Transmission.</u>

Although voice services that originate and terminate on the PSTN may be converted to IP for transport, the Commission should retain its current classification for these telecommunications services. In this case, the conversion to IP after initiation on the PSTN and conversion back to TDM for termination on the PSTN is similar to the digital voice transportation that carriers have been using for thirty years. 44 Efficient means of transporting circuit switched telephony from the PSTN originating access point to the PSTN terminating access point provide no additional capabilities or services to the

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⁴¹ Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501 (1998)("Stevens Report").

⁴² Pulver Declaratory Order, at ftnt. 54.

⁴³ *Id.*, at ¶ 12. ("The fact that the information service Pulver is offering happens to facilitate a direct disintermediated voice communications, among other types of communications, in a peer-to-peer exchange cannot and does not remove it from the statutory definition of information service and place it within, for example, the definition of telecommunications service.").

Pulse Code Modulation is the method of encoding an analog voice signal into a digital bit stream. *Newton's Telecom Dictionary*, 17th Edition, Feb. 2001.

consumer. Moreover, due to the PSTN origination and termination of these services, current means of determining jurisdiction may be used.

C. <u>IP-Enabled Voice Services that Originate or Terminate (but not both) on the PSTN.</u>

An IP-enabled voice service that originates or terminates on the PSTN (but not both) should be classified as a Title One "Information Service," generally exempt from most Title II obligations, and subject to exclusive jurisdiction by the Commission. In this case, the voice service is either originated off of the PSTN (for example, on a broadband Internet connection) or terminates off of the PSTN (for example, a called party that uses a NANP number to receive calls via his/her ISP).

These services most likely originate or terminate on IP, and the imposition of telecommunications services regulations due to the limited interaction with the PSTN would be violative of the Commission's mandate under Section 230 of the Act and Commission precedent in this area. Section 230 codifies the Congressional mandate for a national policy "to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services." A "telecommunications service" designation that would impose common carrier and state regulation on a service that interacts with the Internet would be unprecedented.

Alternatively, the Commission could employ its Section 10 Forebearance authority and restrict the application of many Title II obligations while maintaining a Telecommunications Services categorization of IP-enabled voice services that originate or terminate off (but not both) of the PSTN. Section 10 of the Communications Act requires the Commission to forbear from applying regulations that are (1) not necessary

to ensure that charges, practices, classifications, or regulations are just and reasonable and are not unjustly or unreasonable discriminatory, (2) not necessary for the protection of consumers, and (3) not consistent with the public interest. By maintaining the telecommunications service categorization but seeking to create regulatory parity among the various scenarios, the Commission will have the burden of satisfying the Section 10 criteria to determine which Title II requirements are no longer in the Public Interest.

VI. Specific Regulatory Requirements and Benefits

In Paragraph 45 of the NPRM, the Commission requests commenters discuss how it may alter the regulatory treatment that might otherwise accompany the statutory classification advocated for various classes of IP-enabled services. Specifically, the Commission mentions 911 emergency access services, 46 disability access, 47 and intercarrier compensation. 48 Generally, Alcatel's position is that the advancements in technology that have enabled high-quality IP voice service to become a consumer reality will also provide the technical solutions needed to achieve certain social benefits, such as emergency services and disabled access presently enjoyed on the PSTN. Likewise, the facilities-based service providers that own their networks must be adequately compensated for the use of these facilities. Any opportunities that promote or enable means to bypass the compensation system for local networks will preclude the network operators of the revenue necessary to maintain and enhance these facilities.

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⁴⁵ 47 U.S.C. §160(a).

⁴⁶ IP-Enabled Services NPRM, ¶ 50.

^{4′} Id., ¶ 58.

⁴⁸ *Id.*, ¶ 61.

A. 911 Access on VoIP

Consistent with Alcatel's general position on the social benefits provided with voice services, the Commission should seek to maintain its current 911 and E911 obligations on telecommunications service providers and devise a new obligation for information service providers offering IP-enabled voice services. Alternatively, if the Commission maintains a "telecommunications service" classification for IP-enabled voice services but employs its Section 10 forbearance authority to eliminate unnecessary requirements, then these public safety obligations should continue to be enforced.

Under both the Communications Act's Public Interest standard and the Public Safety Act of 1999, ⁴⁹ the Commission clearly has an obligation to ensure voice consumers are afforded the highest level of public safety. Most IP-enabled voice services currently satisfy the first three criteria for 911/E911 regulation in the E911 Scope Order: (1) entities offer real-time voice services interconnected with the PSTN, (2) customers have a reasonable expectation for 911/E911 services, and (3) the service competes with traditional PSTN or CMRS services. ⁵⁰ While it is possible to provide location based services for IP-enabled voice services that originate and/or terminate off of the PSTN, this technology is currently being made more of a commercial reality. Alcatel, which is currently offering several products that provide GPS location capabilities, agrees with the NENA/Von Coalition press release that 911 access may be available in the near future but many service providers do not currently possess this capability in a manner that can be widely deployed.

⁴⁹ Wireless Communications and Public Safety Act of 1999, Pub. L. No 106-81, 113 Stat. 1286.

There are certain situations in which consumers will not have a reasonable expectation that the IP-enabled voice service will provide 911 services. For example, an Xbox with voice interactivity is not

However, advancement of this important public safety obligation should not delay the Commission's ruling regarding how the service will be regulated. Vendors, providers, and the Commission can work through this issue contemporaneously and subsequent to a determination concerning jurisdiction and classification.

B. Disability Access

Alcatel urges the Commission to maintain its disability accessibility requirements for voice service providers, regardless of the platform or technology employed. The technological developments that have enabled IP voice services should justify an enhancement of the service offering to the disabled community, not a reduction.

Previous Commission decisions, including the *IP Relay and Video Relay Service Order* cited by the Commission in its NPRM, have recognized the benefits of IP for disabled access and have determined that such services are within the definition of a Telecommunications Relay Service.

As with 911 obligations, advancement of this important social obligation should not delay the Commission's ruling regarding how the service will be regulated. Vendors, providers, and the Commission can work through this issue contemporaneously and subsequent to a determination concerning jurisdiction and classification.

C. <u>Intercarrier Compensation</u>

Alcatel agrees with the Commission's statement in Paragraph 61 of the NPRM that any service provider that sends traffic to the PSTN should be subject to similar compensation obligations, irrespective of whether the traffic originates on the PSTN, on

meant as a replacement for PSTN service and it is not reasonable for an individual to call for emergency services using a video game device.

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an IP network, or a cable network. As an equipment supplier and vendor to facilities-based services providers throughout the world, Alcatel can attest to the high cost associated with maintaining and/or enhancing communications networks. Any compensation system that discriminates in favor or against traffic due to the platform from which it originated or even the location of its destination will create an atmosphere for arbitrage and bypass.

One of the reasons the Internet has experienced such great success is that it is distance insensitive. Once the traffic enters the network, the destination of the peer or the server hosting the requested information is irrelevant to the consumer's cost. If disparate intercarrier compensation regimes coexist where one is distance sensitive and the other insensitive, then the traffic is going to follow a least cost routing pattern and the incentives for bypass will be heightened.

The Commission is currently engaged in a wide ranging reform of the intercarrier compensation regime in the U.S. and several parties have stated that the goal is to move from regulated charges to a bill & keep methodology. Alcatel is not stating a position within this docket; however, any system that relies more on commercial agreements and creates a more uniform compensation method would reduce the chances for arbitrage and bypass.

VII. The Commission Should Create Regulatory Parity for IP-Enabled Services Over Wireless and Cable Television Facilities, and It Should Create Parity for the Delivery of IP-enabled Internet Access and Video Services.

In the NPRM, the Commission requests comment on the regulatory treatment of IP-enabled services, such as VoIP, that are delivered by CMRS providers (Title III) or over cable plant (Title VI). Alcatel urges the Commission to eliminate disparities

between IP-enabled services based on legacy rules or the specific platforms used to provide these services. Asymmetric regulation of distinct platforms providing similar services is most evident in the broadband access market as many DSL providers are subject to legacy unbundling and ISP access rules that do not apply to their cable modem competitors. As the leading provider of equipment that enables telephone networks to provide DSL and other broadband services throughout the world, Alcatel has experienced the negative impact asymmetric regulation can have on investment. Recent developments to reduce this asymmetry in the Commission's Triennial Review Order have had a demonstrable benefit on broadband deployment in the United States, particularly DSL lines.⁵¹

Alcatel urges the Commission to conclude its Wireline Broadband proceeding⁵² and use this proceeding to create a more competitive environment for the delivery of video services. Regardless of the outcome in the Brand X decision,⁵³ the Commission should expeditiously finalize its order in the Wireline Broadband proceeding, create regulatory parity, while ensuring fair use for consumers and a reasonable transition for unaffiliated ISPs.⁵⁴

In response to this inquiry,⁵⁵ Alcatel urges the Commission to use this proceeding to create a more favorable environment for the delivery of video services in competition with incumbent cable television operators. Telephone network based broadband

Internal Alcatel data shows the net adds of DSL lines for the four RBOCs have increased by 47% when comparing the five quarters before February 2003 with the five quarters since February 2003 (inclusive).

Wireline Broadband NPRM. See also, Reply Comments of the High Tech Broadband Coalition, CC 02-33 (filed July 1, 2002).

⁵³ See, Ex Parte of High Tech Broadband Coalition, CC 02-33 (filed Sept. 25, 2003) (stating the Commission may move forward with providing regulatory relief to ILEC provided broadband access services by (1) information services designation, or (2) private carriage under Title I).

⁵⁴ *Id.* (proposing a two year transition for unaffiliated ISPs, disclosure requirements for transport services, and consumer broadband connectivity principles).

networks, both DSL over copper and fiber loops to the user, can provide video services in addition to voice and Internet access.⁵⁶ This "triple play" of services is necessary for operators to justify the substantial investment, particularly fiber to the user in the consumer market. However, service providers using the telephone network will be discouraged in providing video services if they are subject to local franchising obligations or disparate Title II requirements. IP-enabled video services should be classified as information services and subject exclusively to the Commission's jurisdiction, regardless of whether they are delivered over a telephone, cable, or wireless network.

VIII. The Commission Should Exclude Rate Regulation From Providers That Lack Market Power.

Alcatel agrees with the Commission's statement in Paragraph 5 of the NPRM, which notes that much of the telecommunications regulation implemented by the Commission had its roots in seeking to control monopoly ownership of the PSTN. Most of the Commission's regulations requiring disclosure and nondiscriminatory access are justified based on the market power of the licensee rather than the fact that it is delivering voice services to consumers.

The Commission should carefully analyze this market to ensure dominant carrier regulations are applicable, are not prematurely removed for providers that maintain market power or bottleneck facilities, or, likewise, inappropriately maintained for providers without market power or control of bottleneck facilities. Recognizing that IP is a disruptive service that provides opportunities for the horizontal expansion of non-

⁵⁵ IP-Enabled Services NPRM, at ¶70.

traditional service providers to compete with incumbents for the delivery of voice, data, and video, Alcatel urges the Commission to reexamine its legacy rules, particularly those requiring rate regulation and regulated access, and eliminate those that are no longer competitively necessary or create regulatory disparity between platforms that provide similar services to consumers. For example, the imposition of dominant carrier regulations may no longer be justified if the Commission determined IP-enabled services create a competitive atmosphere in which consumers have legitimate choices among several different platforms that provide competing services and no individual provider has the ability to effectively act anticompetitively. In fact, the continued imposition of such rules upon a distinct class of competitors, unless justified based on a thorough analysis of the market, would unnecessarily increase the costs of service, disrupt the marketplace, and preclude consumers from the full benefits of competition.⁵⁷

IX. Conclusion

Alcatel appreciates the Commission's attention and dedication to the issues surrounding IP-enabled services. IP-enabled services will create the "multimedia over IP" that Alcatel promotes to its service provider and enterprise customers. The communications world has entered an exciting era in which voice, data, and video can be services over multiple platforms in a truly competitive environment. Disparate or

Alcatel is currently offering Video over DSL to several operators throughout the world. *Alcatel Touts Video over DSL*. http://www.lightreading.com/document.asp?doc_id=46048

^{57 &}quot;...the Commission has acknowledged that imposing regulation in a competitive market can be affirmatively harmful: "Regulation often can distort the workings of the market by imposing costs on market participants which they otherwise would not have to bear." *Petition of SBC Communications Inc. for Forebearance*, WC Docket No. 04-29 (filed Feb. 5, 2004)(citing, Report and Order, *Procedures for Implementing the Detariffing of Customer Premises Equipment and Enhanced Services*, 95 FCC 2d 1276, 1301 (1983)).

unjustified legacy regulations would only impede the development of these services, causing harm to consumers and providers.

Respectfully Submitted,

ALCATEL NORTH AMERICA

May 28, 2004